AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q90673

Application No.: 10/552,826

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (currently amended): A woven or knitted fabric containing yarns (1) having a high-

water-absorbing and self-elongating property and yarns (2) having a low water-absorbing and

self-elongating property,

wherein

(1)(i) when the high water-absorbing and self-elongating yarns (1) and the low water-

absorbing and self-elongating yarns (2) are respectively subjected to a measurement of self-

elongating on absorbing water in such a manner that each of the yarns is wound 10 times around

a reel for hank having a circumference of 1.125m long under a load of 0.88 mN/dtex to form a

hank; the hank is removed from the reel and left to stand in the air atmosphere having a

temperature at 20C and a relative humidity at 65% for 24 hours to dry the hank; then the length

(Ld, mm) of the dry hank is measured under a load of 1.76 mN/dtex when the yarn is a non-

elastic yarn having an elongation at break of 200% or less, or under a load of 0.0088 mN/dtex

when the yarn is an elastic yarn having an elongation at break higher than 200%; the hank is

immersed in water at a temperature at 20°C for 5 minutes; then the hank is taken out from water;

a length (Lw, mm) of the wet hank is measured under the same load as described above in

response to the elongation at break of the hank; and the self-elongation of each yarn is calculated

in accordance with the following equation:

Self-elongation of yarn (%): [(Lw-Ld)/(Ld)] x 100

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/552,826

one (1) of the two type of yarns is a high water-absorbing, self-elongating yarn having a mean self-elongation of +5% or more and the other (2) is a low water-absorbing, self-elongating varn having a mean self-elongation lower than +5%;

(2)(ii) the high water-absorbing, self-elongating yarns (1) are constituted from polyetherester monofilament fibers formed from polyetherester polyetherester elastomer comprising hard segments comprising polybutylene terephthalate blocks and soft segments consisting of polyoxyethylene glycol comprising polyoxyethylene glycol blocks having a number average molecular weight of 1,000 to 6,000; and the ratio by mass of the hard segments to the soft segments in the polyetherester elastomer is in the range of from 30/70 to 70/30; and

(3)(iii) when a test piece is prepared from the woven or knitted fabric in such a manner that the fabric is stabilized in dimension in the atmosphere having a temperature at 20°C and a relative humidity at 65% and then cut into pieces of 30 cm long in the warp or wale direction and 30 cm long in the weft or course direction; and when the high water-absorbing and selfelongating yarns (1) and the low water-absorbing and self-elongating yarns (2) and respectively contained in the test pieces arranged in the same direction as that of the high water-absorbing and self-elongating yarns (1) and the low water-absorbing and self-elongating yarns (2) in the test piece are detached from the test piece, the high water-absorbing and self-elongating yarns (1) and the low water-absorbing and self-elongating yarns (2) satisfy the following requirement:

 $A/B \le 0.9$

wherein A represents a mean length of the detached high-water-absorbent waterabsorbing and-self-elongative self-elongating yarns (1) and B represents a mean length of the detached low water-absorbing and self-elongating yarns (2), the yarns (1) and (2) being which have been arranged in the same direction as each other in the test piece and picked up from the AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q90673

Application No.: 10/552,826

test piece that of the high water-absorbing and self-elongating yarns (1) and the low water-

absorbing and self-elongating yarns (2) in the test piece,; the length of the respective yarn being

measured each of the detached yarns having been measured under a load of 1.76 mN/dtex when

the yarn is a non-elastic yarn having an elongation at break of 200% or less or under a load of

0.0088 mN/dtex when the yarn is an elastic yarn having an elongation at break higher than

200%, and whereby the air-permeability of said woven or knitted fabric increases when wetted

with water.

2. (canceled).

3. (currently amended): The woven or knitted fabric containing two different types of

yarns as defined by-claim 3 claim 1, wherein the difference (E₍₁₎ - E₍₂₎) between the self-

elongation (E₍₁₎) upon absorbing water of the yarn (1) and the self-elongation (E₍₂₎) upon

absorbing water of the yarn (2) is in a range of from 5 to 40%.

4. (previously presented): The woven or knitted fabric containing two different types of

yarns as defined by claim 1, having a knitted fabric structure, in which the yarns (1) and (2) are

combined in parallel with each other, and the combined yarns form composite yarn loops in the

fabric.

5. (previously presented): The woven or knitted fabric containing two different types of

yarns as defined by claim 1, having a woven fabric structure in which the yarns (1) and (2) are

combined in parallel with each other, and the combined yarns form at least one of warps and

wefts of the woven fabric.

6. (previously presented): The woven or knitted fabric containing two different types of

yarns as defined by claim 1, wherein composite yarns or paralleled yarns formed from the two

types of yarns (1) and (2), and the yarn (2) are arranged alternately with every at least one yarn in

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/552,826

at least one direction selected from the warp and west directions of the woven fabric structure or in at least one direction selected from the wale and course directions in the knitted fabric

structure.

7. (previously presented): The woven or knitted fabric containing two different types of

yarns as defined by claim 1, wherein at least one of the yarns (1) is combined with at least one of

the yarns (2) to form a composite yarn.

8. (canceled).

9. (previously presented): A woven or knitted fabric containing two different types of

yarns as defined by claim 1, wherein fibers from which the yarn (2) having a low water-

absorbing and self-elongating property is constituted, are selected from polyester fibers.

10. (previously presented): A woven or knitted fabric containing two different types of

varns as defined by claim 1 wherein, when the fabric is subjected to a measurement of change in

opening area of the fabric in such a manner that a plurality of test pieces of the woven or knitted

fabric are left to stand in the air atmosphere having a temperature at 20°C and a relative humidity

at 65% for 24 hours to prepare a plurality of dry test pieces and, separately, a plurality of other

test pieces of said woven or knitted fabric are immersed in water at a temperature at 20°C for 5

minutes, then taken out from water, and sandwiched between a pair of filter papers under the

pressure of 490 N/m² for one minute to remove water existing in the interstices between fibers in

the test pieces to prepare a plurality of wet test pieces, surfaces of each of the dry and wet test

pieces are observed by an optical microscope at a magnification of 20 and the opening areas of

the dry and wetted test pieces are calculated in accordance with the following equation:

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/552,826

Opening area (%) =

[(total area of openings between yarns)/

(observed area)] \times 100

then, a mean value of the measured opening areas of each of the dry and wetted test pieces are calculated and a change between the mean opening area of the wetted test pieces and the mean opening area of the dry test pieces was calculated in accordance with the following equation:

Change in opening area (%) =

[(mean opening area of wetted test pieces) - (mean opening area of dry test pieces)]/(mean opening area of dry test pieces) \times 100,

the resultant change in the opening area is at least 10%.

11. (previously presented): A woven or knitted fabric containing two different types of yarns as defined by claim 1 wherein, when a plurality of test pieces of the woven or knitted fabric are left to stand in the air atmosphere having a temperature of 20°C and a relative humidity of 65% for 24 hours to prepare a plurality of dry test pieces and, separately, a plurality of other test pieces of the woven or knitted fabric are immersed in water at a temperature of 20°C for 5 minutes, taken out from water, and sandwiched between a pair of filter papers under the pressure of 490 N/m² for one minute to remove water existing in the interstices between fibers in the test piece to prepare a plurality of wet test pieces, air-permeabilities of the dry and wetted test pieces are measured in accordance with JIS L 1096-1998, 6.27.1, Method A (Frazir type method), and a mean air-permeability of the dry test pieces and a mean air-permeability of the wet test pieces are calculated from the measurement data, and the change in air-permeability is calculated in accordance to the following equation:

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/552,826

Attorney Docket No.: Q90673

Change in air-permeability =

[(mean air-permeability of wetted test pieces) - (mean air-permeability of dry test

pieces)]/(mean air-permeability of dry test pieces) \times 100,

the resultant change in air-permeability is 30% or more.

12. (previously presented): A woven or knitted fabric containing two different types of

yarns as defined by claim 1, having a change in roughness of at least 5%; determined in such a

manner that a plurality of test pieces of the woven or knitted fabric are left to stand in the air

atmosphere at a temperature of 20°C at a relative humidity of 65% for 24 hours to prepare a

plurality of dry test pieces and, separately, a plurality of other test pieces of the woven or knitted

fabric are immersed in water at a temperature of 20°C for 5 minutes, are taken out from water,

and then are sandwiched between a pair of filter papers under the pressure of 490 N/m² for one

minute to remove water existing in the interstices between fibers in the test pieces to prepare a

plurality of wet test pieces, thickness (H1) of convexities and thickness (H2) of concavities

formed in the woven or knitted fabric structure of each dry and wetted test pieces are measured, a

roughness of each of the dry and wetted test pieces is calculated in accordance with the following

equation:

Roughness (%) =

(thickness H1 of convexities) - (thickness H2 of concave portion)/(thickness H2 of

concavities) × 100

wherein the thickness H1 of the convexities is a mean thickness of a convexities having an area

of 1 mm × 1 mm and the thickness H2 of the concavities is a mean thickness of the concavities

having an area of 1 mm \times 1 mm and located in an approximately center part between two

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/552,826

Attorney Docket No.: Q90673

convexities adjacent to the concavities in the warp or course direction thereof, and the change in

roughness is calculated in accordance with the following equation:

Change in roughness =

[(roughness of wetted test piece) - (roughness of dry test piece)]/100.

13. (previously presented): A woven or knitted fabric containing two different types of

yarns as defined by claim 1, having a woven fabric structure in which structure a warp yarn

group $W_{(2)}$ consisting of a plurality of warp yarns, each formed solely from the yarns (2) having

a low water-absorbing, self-elongating property and a warp yarn group $(W_{(1+2)})$ consisting of a

plurality of warp yarns, each formed of a composite yarn or a paralleled yarn formed from the

yarns (1) having a high water-absorbing, self-elongating property and the yarns (2) having a low

water-absorbing, self-elongating property, are alternately arranged with each other and the warp

yarn groups intersect a weft yarn group $F_{(2)}$ consisting of a plurality of weft yarns, each formed

solely from the yarns (2) having a low water-absorbing, self-elongating property, and a weft yarn

group (F₍₁₊₂₎) consisting of a plurality of weft yarns, each formed from composite yarns formed

from the yarns (1) having a high water-absorbing, self-elongating property and the yarns (2)

having a low water-absorbing, self-elongating property, whereby a plurality of regions having a

high water-absorbing and self-elongating property and formed by the intersection of the warp

group $(W_{(1+2)})$ and the west group $(F_{(1+2)})$, are arranged with spaces from each other both in the

warp and weft directions, in the form of islands in sea.

14. (previously presented): A woven or knitted fabric containing two different types of

yarns as defined by claim 1, having a double knitted structure comprising a cylinder side knitted

layer and a dial side knitted layer tucked from either one of said layers to the other, wherein the

cylinder side knitted layer is formed from the yarns (2) having a low water-absorbing, self-

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/552,826

Attorney Docket No.: Q90673

elongating property, and in the dial side knitted layer, regions composed solely of the yarns (2)

having a low water-absorbing, self-elongating property and regions composed of composite

yarns, each formed of the yarn (1) having a high water-absorbing, self-elongating property and

the said yarn (2) having a low water-absorbing, self-elongating property, are arranged alternately

with each other in the course direction and/or the wale direction.

15. (previously presented): A woven or knitted fabric, containing two different types of

yarns as defined by claim 1, having a triply knitted structure comprising a cylinder side knitted

layer, a dial side knitted layer and an intermediate knitted layer disposed between the above-

mentioned two layers; either one of the intermediate layer and the cylinder side knitted layer or

the dial side knitted layer being tucked from the other, wherein the intermediate knitted layer is

formed solely of the yarns (2) having a low water-absorbing, self-elongating property, and in

each of said dial side and cylinder side knitted layers, regions composed solely of the yarns (2)

having a low water-absorbing, self-elongating property and regions composed of composite

yarns, each formed of the yarn (1) having a high water-absorbing, self-elongating property and

the yarn (2) having a low water-absorbing, self-elongating property, are alternately arranged with

each other in the course direction and/or the wale direction.

16. (previously presented): A woven or knitted fabric containing two different types of

yarns as defined by claim 1, having a knitted fabric structure formed from of the two types of

yarns (1) and (2), wherein the knitted fabric structure has a yarn density satisfying the following

equation:

 $Co \times We \ge 2,000$

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/552,826

wherein Co represents the number of courses per 2.54 cm in the transverse direction of said knitted fabric, and We represent the number of wales per 2.54 cm in the longitudinal direction of said knitted fabric.

17. (canceled).

18. (previously presented): A woven or knitted fabric, containing two different types of yarns as defined by claim 1, having an air-permeability of 50 ml/cm².sec or less, determined in accordance with JIS L 1096-1998, 6.27.1, Method A (Frazir type method), in the air atmosphere having a temperature of 20°C and a relative humidity of 65%.

19. (previously presented): A woven or knitted fabric, containing two different types of yarns as defined by claim 1, having a woven fabric structure in which one of warp and weft of the fabric is formed from composite or paralleled yarns, each formed from at least one yarn having a high water-absorbing, self-elongating property and at least one yarn having a low water-absorbing, self-elongating property, and the other one of warp and weft is formed from the yarns having a low water-absorbing, self-elongating property, and further exhibiting a cover factor CF in the range of from 1,800 to 2,800, determined in accordance with the following equation:

$$CF = (DWp/1.1)^{1/2}xMWp + (DWf/1.1)^{1/2}xMWf$$

wherein DWp represents a total yarn thickness (dtex) of the warp yarns, MWP represents a weaving density (yarns/3.79 cm) of the warp yarns, DWf represents a total yarn thickness (dtex) of the weft yarns, and MWf represents a weaving density (yarns/3.79 cm) of the weft yarns.

20. (original): A woven or knitted fabric containing two different types of yarns as defined by claim 19, wherein the composite yarn comprises a core portion formed from at least one yarn having a high water-absorbing, self-elongating property and a sheath portion

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/552,826

surrounding the core portion and formed from a plurality of yarns having a low water-absorbing, self-elongating property.

21. (previously presented): Clothing comprising the woven or knitted fabric containing two different types of yarns as defined by claim 1, and capable of increasing the air-permeability thereof upon absorbing water.

22. (original): Clothing as defined by claim 21, wherein at least one portion of said clothing selected from an armhole, a side, a bust, a back and a shoulder is formed from the woven or knitted fabric containing two different yarns.

23. (original): Clothing as defined by claim 21, selected from underwear.

24. (original): Clothing as defined by claim 21, selected from sportswear.